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Nebraska Tractor Tests

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Larsen

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January 1928

### Test 148: Lauson S12 20-35

Tractor Museum

*University of Nebraska-Lincoln*, [TractorMuseumArchives@unl.edu](mailto:TractorMuseumArchives@unl.edu)

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UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT  
AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 148

LAUSON "S12" 20-35

Dates of test: April 2nd to 16th, 1928

Name, model and rating of tractor: Lauson "S12" 20-35

Manufacturer: John Lauson Mfg. Co., New Holstein, Wisconsin.

B R A K E H O R S E P O W E R T E S T S

H. P.	:Crank : :shaft :	Fuel Consumption	:Water consumption : :per hour gallons :	Temp. : :Deg. F. :	: Barometer
:speed :	:Gals. :H. P. :Lbs. @ : :R.P.M. :per :hrs. @ :H.P. :	:Cool-:In : :ing :fuel :Total :ing :Air :	:Inches of :mercury		
:	:hour :gal. :hour :	:	:med. :	:	:

OPERATING MAXIMUM LOAD TEST. ONE HOUR (.97% of maximum load)

40.88	: 1113	: 4.629	: 8.83	: 0.702	: 000	: 0.24	: 0.24	: 191	: 60	: 28.48
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RATED LOAD TEST. ONE HOUR

35.24	: 1099	: 4.419	: 7.97	: 0.778	: 000	: 0.22	: 0.22	: 191	: 61	: 28.48
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VARYING LOAD TEST. TWO HOURS

35.11	: 1097	: 4.635	: 7.57	: 0.819	:	:	:	: 196	: 75	: 28.46
00.90	: 1159	: 2.303	: 0.39	: 15.88	: 1	:	:	: 166	: 72	: 28.46
18.13	: 1129	: 3.010	: 6.02	: 1.029	:	:	:	: 184	: 73	: 28.46
36.29	: 1071	: 4.452	: 8.15	: 0.761	:	:	:	: 190	: 76	: 28.46
9.18	: 1140	: 2.603	: 3.53	: 1.758	:	:	:	: 168	: 74	: 28.46
26.59	: 1105	: 3.832	: 6.94	: 0.894	:	:	:	: 185	: 76	: 28.46
21.40	: 1116	: 3.473	: 6.16	: 1.006	: 000	: 0.79	: 0.79	: 182	: 74	: 28.46

D R A W B A R H O R S E P O W E R T E S T S

H. P.	:Draw : :bar :	Speed : :miles :	Crank : :shaft :	Slip : :on :	Fuel Consumption : :H.P. :Lbs. :used :	Water: : :Gal. :Cool-: :Inches of	Temp. : :Deg. F. :	: Barometer
:pull : :pounds:	:per : :hour :	:speed : :R.P.M. :	:drive : :wheels:	:Gal. : :per :	:hr. : :per :	:h.p. : :per :	:ing : :med. :	:Air:mercury
:	:	:	: % :	:hour :	:gal. :hour :	:hour :	:	:

RATED LOAD TEST. TEN HOURS. High Gear.

20.04	: 2201	: 3.41	: 1101	: 5.37	: 3.939	: 5.09	: 1.219	: 0.25	: 183	: 63	: 28.61
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MAXIMUM LOAD TEST

29.63	: 3259	: 3.41	: 1093	: 5.48	: -- NOT RECORDED --	:	: 176	: 55	: 28.85
28.53	: 5140	: 2.08	: 1133	: 18.91	: -- NOT RECORDED --	:	: 175	: 60	: 28.69

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BRIEF SPECIFICATIONS

MOTOR: Make: Le Roi Serial No. 901-19 Type 4 cylinder vertical  
Head: "I" Mounting Lengthwise  
Bore and stroke: 4-1/2 x 6 in. Rated R.P.M. 1100  
Port Dia. Valves: Inlet 1-15/16 Exhaust 1-15/16  
Belt pulley: Diam. 16 in. Face 8 in. R.P.M. 697  
Magneto: American Bosch Model ZR4  
Carburetor: Tillotson Model R2 Size 1-1/4  
Governor: Taco No. 6918 Type Fly-ball  
Air Cleaner: Taco Type Water  
Lubrication: Force feed and splash

CHASSIS:

Type 4 wheels Serial No. 3800 Drive Enclosed gear  
Clutch: Twin disc Type Dry plate Operated by Hand  
Advertised speeds, miles per hour: Low 2-1/4 - 2-1/2  
High 3-1/4 - 3-1/2 Reverse 2  
Drive wheels: Diameter 48" Face 12"  
Lugs: Type Spade No. per wheel 32 Size 5" x 3" x 6"  
Extension rims: Width 6" Seat Pressed steel  
Total weight as tested (with operator) 6228 pounds.

FUEL AND OIL

Fuel: Gasoline Weight per gallon 6.20  
Oil: Mobiloil "BB" To fill crankcase 2 gallons  
Additional amount used during test 4.25 gallons  
Total number of hours of test 46

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REPAIRS AND ADJUSTMENTS

All spark plug gaps were adjusted to 0.025". At the end of the belt tests number two cylinder had a leaky exhaust valve, all valves were ground and carbon removed. The carburetor float valve was leaking at the end of the test.

REMARKS

The tests herein reported were conducted with one carburetor setting which remained unchanged throughout the tests. This condition should be recognized when comparing this test with any Nebraska test conducted prior to 1928.

In the advertising literature submitted with the specifications and application for test of this tractor we find no claims and statements which, in our opinion, are unreasonable or excessive.

The results of this test indicate that the rating of this tractor does not exceed the provisions of the tractor rating code of the American Society of Agricultural Engineers and the Society of Automotive Engineers.

We, the undersigned, certify that above is a true and correct report of official tractor test No. 148.

Lew Wallace  
\_\_\_\_\_  
Engineer-in-Charge

Oscar W. Sjogren  
\_\_\_\_\_

E. E. Brackett  
\_\_\_\_\_

C. W. Smith  
\_\_\_\_\_  
Board of Tractor Test Engineers